

WHAT IS CLAIMED IS:

1. A method of shifting attention comprising the steps of:
determining the location for a focus of attention;
determining a display event;
5 determining the location of the display event; and
determining an attention shifting display element based on the display
event, the determined location of the display event and the focus of
attention.
2. The method of claim 1, further comprising determining the distance
10 between the focus of attention and the display event; and wherein the
attention shifting display element is determined based on the location of the
display event and the determined distance.
3. The method of claim 1, wherein the focus of attention is determined
based on at least one of: monitoring user actions and monitoring user activity.
- 15 4. The method of claim 3 wherein user actions are monitored based on at
least one of eye-tracking, head tracking, arm tracking, user selection tracking,
video information, audio information and gestures.
5. The method of claim 1, wherein the display event is associated with at
least one of animated information, static information and help information.
- 20 6. The method of claim 1, wherein the focus of attention is located on a
first display and the display event is located on a second display.
7. The method of claim 1, wherein the distance between the focus of
attention and display event includes at least one non-sensible portion.
8. The method of claim 6, wherein the distance between the focus of
25 attention and the display event includes at least one non-sensible portion.
9. The method of claim 1, wherein determining the attention shifting
display element comprises the steps of:
determining a dynamic attention shifting display element based on a
display event located at the periphery of attention; and
30 determining a static attention shifting display element based on a
display event located at the focus of attention.
10. The method of claim 1, wherein determining the attention shifting
display element comprises determining a combination attention shifting display

element based on a display event located more than a threshold distance from the focus of attention.

11. The method of claim 9, wherein the focus of attention is located on a first display and the display event is located on a second display.

5 12. A method of determining an attention shifting display element comprising the steps of:

determining a focus of attention;

determining a location of a display event;

10 determining an attention directing portion of an attention shifting display element based on the focus of attention and the location of the display event.

13. The method of claim 12, further comprising determining an attention attracting portion of an attention shifting display element based on the distance between the location of the display event and the location of the focus of attention.

14. The method of claim 12, further comprising determining at least one information portion within the focus of attention, associated with the attention shifting display element, and where the information portion displays information associated with the display event.

20 15. The method of claim 14, where the information portion is at least one of: a mathematical operator and a symbolic operator.

16. The method of claim 12, where the attention shifting display element is dynamically determined based on continued focus of attention on a display region.

25 17. The method of claim 16, where the continued focus of attention is determined based on user monitoring.

18. The method of claim 12, where the attention shifting display element is dynamically determined based on continued focus of attention on the display event and wherein the display event is based on at least one of: a mouse event; a keyboard event and exceeding a threshold time.

30 19. A system of shifting attention comprising:
an input/output circuit for receiving a display event information;
a memory;

a processor;

an attention determination circuit that determines a focus of attention;

a display event location determination circuit that determines the location of the display event; and

5 an attention shifting display element determination circuit that determines an attention shifting display element based on the display event information, the location of the display event and the location of the focus of attention.

10 20. The system of claim 19, further comprising a distance determination circuit that determines the distance between the focus of attention and the display event and the attention shifting display element is determined based on the location of the display event and the determined distance.

21. The system of claim 19, where the focus of attention is determined based on at least one of: monitoring user actions and monitoring user activity.

15 22. The system of claim 21 where the user actions are monitored based on at least one of eye-tracking, head tracking, arm tracking, user selection tracking, video information, audio information and gestures.

20 23. The system of claim 19, where the display event is at least one of animated information, static information and a help message.

24. The system of claim 19, where the focus of attention is located on a first display and the display event is located on a second display.

25 25. The system of claim 19, where the distance between the focus of attention and display event includes at least one non-sensible portion.

26. The system of claim 24, where the distance between the focus of attention and the display event includes at least one non-sensible portion.

27. The system of claim 19, where determining the attention shifting display element comprises the steps of:

30 determining a dynamic attention shifting display elements based on a display event located at the periphery of attention; and

 determining a static attention shifting display element based on a display event located at the focus of attention.

28. The system of claim 19, where determining the attention shifting

display element comprises determining a fusing attention shifting display element based on a display event located more than a threshold distance from the focus of attention.

5 29. The system of claim 27, where the focus of attention is located on a first display and the display event is located on a second display.

30. A system of determining an attention shifting display element comprising:

an attention determination circuit that determines the focus of attention;

10 a display event location circuit that determines the location of the display event; and

an attention directing indicator circuit that determines an attention directing portion of an attention shifting display event based on the focus of attention and the location of the display event.

15 31. The system of claim 30, further comprising the step of determining an attention attracting portion of the attention shifting display element based on the distance between the location of the display event and the location of the attention.

20 32. The system of claim 30, further comprising the step of determining at least one static information portion within the focus of attention associated with the attention shifting display element, and where the static information portion displays information associated with the display event.

33. The system of claim 32, where the information portion is at least one of: a mathematical operator and a symbolic operator.

25 34. The system of claim 30, where the attention shifting display element is dynamically determined based on continued focus of attention on the display event.

35. The system of claim 34, where the continued focus of attention is based on user monitoring.

30 36. The system of claim 30, wherein the continued focus of attention on a display event is based on at least one of: a mouse event; a keyboard event, exceeding a threshold time.

37. Computer readable storage medium comprising: computer readable

program code embodied on the computer readable storage medium, the computer readable program code usable to program a computer for shifting attention comprising the steps of:

- 5 determining the location for a focus of attention;
- determining an display event;
- determining the location of the display event; and
- determining an attention shifting display element based on the display event, and the determined location of the display event.

10 38. A carrier wave encoded to transmit a control program, useable to program a computer for shifting attention, to a device for executing the program, the control program comprising:

- 15 instructions for determining the location for a focus of attention;
- instructions for determining a display event;
- instructions for determining the location of the display event; and
- instructions for determining an attention shifting display element based on the display event, and the determined location of the display event.

20 39. A means of shifting attention comprising:
 a means for determining the location for a focus of attention;
 a means for determining a display event;
 a means determining the location of the display event; and
 a means determining an attention shifting display element based on the display event, the determined location of the display event and the focus of attention.

25 40. A means of determining an attention shifting display element comprising:
 a means for determining a focus of attention;
 a means for determining a location of a display event;
 a means for determining an attention directing portion of an attention shifting display element based on the focus of attention and the location
30 of the display event.